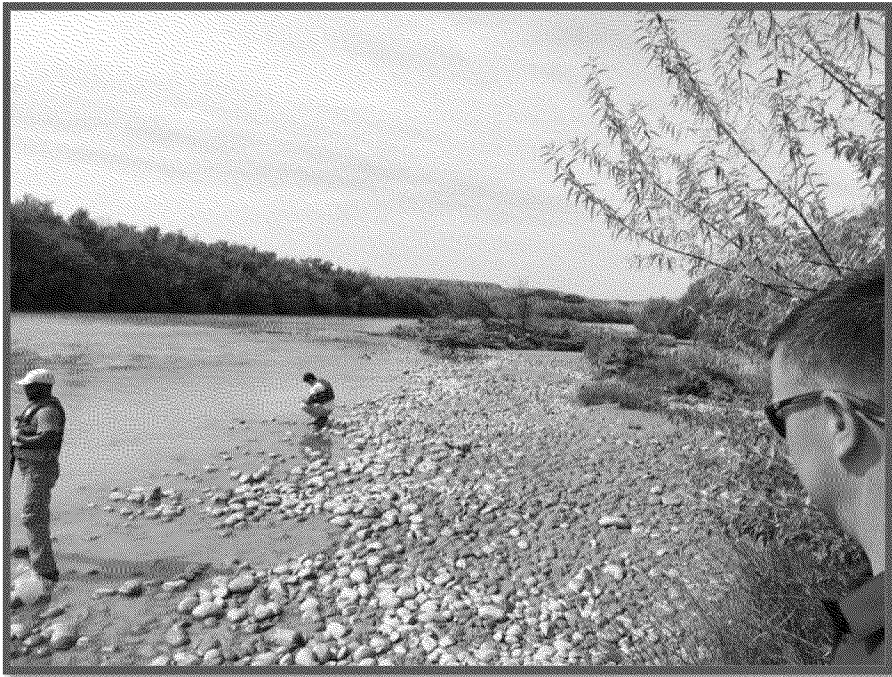


	SITUATION	REPORT		
INCIDENT	COMMAND	POST	GOLD	KING
GOLD	KING	MINE	IDENT	RELEASE
U.S.	ENVIRONMENTAL	PROTECTION	AGENCY	



EPA Contracting collecting collsurface water sample

**Subject:** EXECSUM / SITREP #27  
 Gold King Mine Incident Release  
 San Juan County, Colorado  
 Latitude: 37.8945 107.6384

<b>From:</b>	Situation	Unit,	Incident	Command	Post	Gold	King
<b>Date:</b>	7 September 2015						
<b>Reporting Period:</b>	0700 6 September 2015 through			0700 7 September 2015			
<b>Website:</b>	<a href="http://www.epa.gov/goldkingmine">www.epa.gov/goldkingmine</a>						



EXECUTIVE SUMMARY

**Situation** **Summary**  
United States Environmental Protection Agency Command (US. EPA) is Gold King  
comprised U.S. EPA Regions 8, 6, and 9

**Highlights, Key Updates/Changes**

- ICPGK finalized the Gold King Mine Stakeholders Notification Plan. This plan will notify stakeholders throughout the entire watershed in Regions 8, 6, and 9 of any mine activities which could potentially impact final the plan watershed. expected to the EPA GKM website.
- ICPGK continues to monitor relations with the Navajo Nation.

**Objectives**

- Ensure health and safety of the public and responders.
- Continue implementation of private wells. sampling and water
- Establish strategy MCL exceeded private wells.
- Continue coordination with Federal, State, Tribal and local
- Continue management of mine water discharge.
- Continue mine dump and portal stabilization.
- Assess sediment impacts.
- Identify incident end points.
- Implement river alert and notification plan during mine site operation
- Explore real time monitoring options.
- Continue water and sediment sampling along the Animas a
- Evaluate need for delivery on of Navajo feed Nation for livestock

**Command Emphasis**

For the next operation period, emphasis will be:

- Safety of responders and the public
- Visitors to the mine site are required to go through
- Incident personneling Southern Utah (SU) must be UT messaged by
- All sampling operations in Navajo Nation must be conducted
- Ensure information flow between ICP and Stakeholders is t

The metrics provided in this Situation Report reported rep for 6 work  
September 2015. Press releases are presented in Attach Metrics 1. table cells report text  
highlighted in yellow represent a change/addition from the previous



## 1.0 BACKGROUND

The Gold King Mine (GKM) near Silverton, Colorado is a historic gold mine at an elevation of approximately 11,300 feet above mean sea level. The mine is a contributor of heavy metals into the Animas River. GKM workings have been inaccessible since 1995 when the mine was closed. On 5 August 2015, an estimated volume of up to three million gallons of dissolved metals was suddenly released from the Gold King Mine adit. This water discharged into Cement Creek which feeds into the Animas River, and eventually into the Gulf of Mexico. The U.S. EPA continues to assess and mitigate the effects of the release. EPA continues to sample and analyze the water in the Animas River and Cement Creek. Additionally, EPA continues to schedule sampling of private wells within the alluvial area surrounding the Animas River.

## 2.0 RESPONSE

### 2.1 Mine Operations

A summary of mine operations is presented below.

- Completed installation of security gate. The security gate for Gold King Mine was installed approximately 50 yards past the guard post line. In the event of an emergency, the gate can be opened.
- Lime addition (8 lbs per minute) if needed.
- Automated lime hopper is being used to dispense lime.
- Diverting Gold King water to R&B settling ponds.
- Installed oil boom modified with felt liner to act as a barrier to prevent oil from entering the R&B ponds.
- Monitoring of treatment at process I twice daily.
- Average flow rate 624 gallons approximately minute (gpm) of 3.40 S.U. and treatment pH of 4.96 S.U.
- Continued construction of the Goldstone settling line in Pond 4.

ICPGK finalized the Gold King Mine Stakeholders Alert Plan and notification to the EPA GKM website. The plan will notify Regions 8, 6 and 9 that could potentially be impacted by the release. The plan also includes a "notification mine only" related alert activities such as a notification in its current form will remain in effect as planned. The plan also includes a notification to address the first level of notification and information. Beyond that, initial notification, all parties are responsible for assessing the incident and determining notification. The plan is included as an attachment to this Situation Report.

### 2.2 River Sampling

Operational activities for surface water and sediment sampling summarized below. Sample quantities are based on the SCRIBE data quality assurance/quality control (QA/QC) samples.



Table 1 - Operations			Sampling		Summary	
Matrix			U.S. Region	Qty. (6 Sep 2015)	Qty. (Cumulative)	
Surface Water Samples			8	7	392	
			6	9	330	
			9	0	239	
				16	961	
Sediment Samples			8	5	154	
			6	9	343	
			9	0	192	
				9	689	

## 2.3 Private Wells / Fish Ponds / Sediment

### 2.3.1 Private Wells

Operational activities for drinking water well sampling are summarized in Table 1. The assessment focus area for private drinking water wells includes those private drinking water wells located within 300 feet of the banks of the Animas River (including connected between Baker's Bridge and the Colorado River) and those private drinking water wells located within 500 feet of the banks of the affected waterways (Animas River, San Juan River, and the Animas River watershed). In the New Mexico, there has been no sampling of private wells in the U.S. EPA Region 8.

Private wells that have metals concentrations greater than the MCLs (MCLs) and were collected from private drinking water wells during the first sampling event were sampled a second time to confirm the results. In Region 8, analytical results round to the nearest MCL. Private wells that have MCL exceedances have been identified. For Region 6, there was a private drinking water well that exceeded the MCL for lead. Further assessment by the State of New Mexico determined that the exceedance was unrelated to the GKM.

A summary of private drinking water well sampling is provided below.

Table – Private Drinking Water Well Sampling				Summary		
Matrix				U.S. Region	Qty. (6 Sep 2015)	Qty. (Cumulative)
Private Drinking Water Wells (from SCRIBE, includes QA/QC)	Samples Collected	Locations	Well	8	2	366
				6	0	285
Private Drinking Water Wells Focus Area	Locations	Wells	Well	8	0	45
				6	0	120
Private Drinking Water Wells Focus Area	Locations	Wells	Well	8	2	259
				6	0	0



Table – Private Drinking Water MCL Exceedances			
Matrix			
Within Focus Private D	U.S. Region	Qty. (6 Sep)	Qty. (Cumulative)
Water s Well Containing Contaminant	8	0	1
Concentrations Above MCLs	6 during	0	1*
Second Sampling Event			
Outside of : Focus Private Area	8	0	9
Water Wells Containing Contaminant	6 during	0	0
Concentrations Above MCLs			
Second Sampling Event			

\*Note: One inwell Region 6 exceeded the MCL for lead and aft Mexico and EPA, it was determined that the exceedance was

Private water well sampling was completed 6 on 015 27 and August 20 ongoing in U.S. EPA Region 6.

### 2.3.2 Water Mitigation

No public water systems are currently affected by the release. U.S. EPA purchased 232 cases of bottled water supply the community. Public support activities completed are summarized below.

Table 4 -Public Support Summary							
Activity	Entity	5 Sep 2015			Cumulative		
		Deliveries (each)	Qty. (gal)	Qty. (hay)	Deliveries (each)	Qty. (gal)	Qty. (hay)
Potable Deliveries	US 8EP	0	0			62,000	
	US 8EP	0	0		47	141,980	
Livestock / Agriculture Deliveries	US 6EP				59	1,104,990	
	US 9EP	0	0		13	218,400	
	BIA*	0	0		7	975,888	
Agricultural Food Deliveries	US 6EP				1		244
	US 9EP	0		0	14		5,376

\*Note: -BIA Bureau of Affairs Indian delivered potable non - water to locations in the Navajo approximately 12 August 2015 to 31 August 2015.

Bulk water delivery in Region 8 bottled water was 3 released provided in Region 8. The Region 8 agriculture and livestock tea 20 August demobilized. That have been no potable water deliveries by the nor agricultural EPA foodn by Regions U.S. in EPA Region 8.

The Southern Ute Indian Drinking water (Salt) shak delivered to dr tribal



within the Reservation boundary. Approximately include: volumes to

- 100 cases of bottled water
- 18 water dispensers— five gallons water
- 8,000 gallons of deliveries water (there have been no new re

SUIT Tribal Housing Services completed the installation of 14 impacted tribal residences.

On 4 September 2015, ICPGK instructed metrics summary completed of by water Bureau of Indian Affairs the ( Navajo provided. to the Navajo water Nation for livestock and agricultural summaries. of the metrics is provided below

- From 12 August to 31 delivered August a 2015) of approximately water to seven stations located throughout Navajo Nation.
- The seven stations that received water were designated as
- Gadii Ahi, Teec, Aneth, Pt/Mexican Valley and Mo
- For the seven serviced locations, an Average of 28 clients per d

#### 2.3.3 Other Mitigation Activities

U.S. EPA continues to water conductivity twice parameters daily measurements Fishes, LLC and forward in results to U.S. the EPA own continues to remove ponds sediment for resident along the Animas River.

#### 2.3.4 Water Tank & Assessment Demobilization

On or about 15 August 2015, 15 black steel tanks were delivered by the ERRS contractor locations on the Navajo Reservation as part of the response these tanks is reported to have a capacity of 16,500 g tanks delivered had been it reported reported 13, to but the EPA OSC there were two additional tanks that had not previously been reported. These two tanks ordered by R6 personnel and were not being tracked by OSC confirmed the presence of these two additional tanks.

On 19 August 2015, two tanks at the Upper Fruitland  
On 3 September 2015, the OSC and START conducted an  
include the two tanks that had not been reported until

On 4 September 2015, ilized live by tanks the were ERRS demobn tractor. This tanks:

- Tank 31L Meadow Farms location (This tank had 6,000 the Navajo Nation initially believed was contaminated)
- Tanks 913 and 907 Area 3 West location (these tank
- Tanks 914 and 906 New Meadows Location (these tanks



The Bureau of Indian Affairs (BIA) delivered the water tanks. Metrics for water volumes provided in Table 4 above.

### 3.0 PLANNING

#### 3.1 Environmental Unit

The following sampling post documents have been issued.

Activity	U.S. Region	Qty. (6 Sep 2015)	Cumulative
Validated Analytical Results Private Drinking Water Well Owners (Validation date on or before August 2015)	8	0	17
	(no 6 MCL)	0	0
	9	N/A	N/A

15

The Environmental created (EU) exceeded (of) private well owners that not yet been contacted forwarded the list to U.S. EPA Region 8 Drinking Water Senior Environmental Employees for direct list. The list has contacted target U.S. EPA 319 started making these calls on 3 September, 2015.

#### 3.2 Resources

The table below staffing numbers for the federal entities and response.



Table 5 - Personnel Site On - - -		
Region	Agency / Entity	Number Personnel (6 Sep 2015)
Mine	U.S. EPA	3
	U.S. Coast Guard	4
	U.S. EPA Contractors	8
	U.S. Army Corps of Engineers	0
	U.S. Geological Survey	0
	U.S. Bureau of Reclamation	0
ICPGK	U.S. EPA	27
	U.S. EPA Contractors	24
	USCG	3
	Other Federal, State, Local	2
6	U.S. EPA	0
	U.S. EPA Contractors	5
	USCG	0
	Other Federal, Local and Tribal	0
9	U.S. EPA	0
	U.S. EPA Contractors	0
	USCG	0
	Other Federal, State, Local	0
Total		66

No unmet critical resource needs reported.

#### 4.0 FINANCE

##### 4.1 Estimated Response Costs to Date

The table below summarizes estimated costs for the response.

Table 6 - Estimated Response Costs September 2015					
Region	U.S. EPA Cumulative Expended	U.S. EPA Cumulative Expended	U.S. EPA Cumulative Other Char	U.S. EPA Cumulative Contractors	Total Cumulative Costs
8	\$801,927	\$164,793	\$44,450	\$2,721,936	\$3,733,106
6	\$490,762	\$124,750	\$12,989	\$2,410,163	\$3,038,664
9	\$554,400	\$83,000	\$0	\$900,506	\$1,537,906
TOTAL	\$1,847,089	\$372,543	\$57,439	\$6,032,605	\$8,309,676

##### 4.2 Estimated Burn Rates

The table below summarizes current estimated burn rates for





Table 7 -Estimated Daily			
U.S.	EPA	Estimated (as of)	Daily 2015
8			\$129,560
6			\$41,990
9			\$60,816
Total			\$232,366

## 5.0 LOGISTICS

As of September 2015, Logistics has received overhead personnel requests that have been submitted to the As of Regions September 10 of 2015, the have requests there filled. are nine overhead personnel less/less. Those that assigned in townfi the Min the field need to in complete prior prior field going design. the required also to get a safety briefing prior to reporting to the field

## 6.0 SAFETY

Driving continues be the number Personnel hazardous encouraged to procedures when conducting field activities and driving around town. They should factor in driving time needed and distance to dailythe working shift and field

Work/Rest regimens need to be followed to reduce Heat stress with you when you leave the ICP for field activities.

ICPKG has a Critical Incident Stress Management (CISM) program for personnel involved with the response. 6 September 2015, the CISM center received 200 visits cen from response personnel.

No recordable accidents were reported 6 September 2015.

## 7.0 PUBLIC INFORMATION

### 7.1 Community Engagements

No community engagements 6 September on 2015.

Table 8 -Community Engagement			
Description	U.S.		Qty.
	EPA		(6 Sep 2015)
Community Engagements	8		0
	6		0
	9		0



## 7.2 Anticipated Events: VIPs/Congressional Visits and Events

Known site visits and for public events summarized below

Table 9 - Anticipated Site Visits and Public				Planned Event		Anticipated Date
Update	meeting	with	La	Plata	County	September 2015
Meeting	with	LaCounty	Technical	Subcommittee	September	2015

## 7.3 Community Relationship

Effective August 2015, the calls Regional (970) 385 8700 regarding the Gold King Release Incident are being handled by the National Call Center is now being operated by U.S.A. EPA's all-Hazmat Regional Center during its former operation. AC this includes 20 calls related to Region 6 and 38 calls related to Region 9. The National Call Center has a total of 223 calls related to Region 6 and 38 calls related to Region 9.

## 8.0 LIAISON

Federal, regional local entities participating in the response are summarized below

U.S. EPA  
U.S. Coast Guard (USCG)  
U.S. Fish and Wildlife Services (USFWS)

Colorado Office of Emergency Management (OEM)  
Colorado Department of Public Health and Environment (CDPHE)  
New Mexico Environment Department (NMED)  
New Mexico (NM) Department of Health  
NM Office of the State Engineer  
NM Department of Game and Fish  
State of Utah  
State of Arizona

City of Durango  
La Plata County  
San Juan County  
San Basilio Health Department  
County of - San Mexico

Southern Ute Indian Tribe (SUIT)  
Navajo Nation

## 9.0 SOURCE OF ADDITIONAL INFORMATION

For additional information, refer to [www.epa.gov/goldkingmine](http://www.epa.gov/goldkingmine).



Exec.

Sum/SITREP  
Gold King

September  
Mine ICP  
Gold

2015  
Release  
King

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ATTACHMENT 1  
PRESS RELEASE



Exec.

Sum/SITREP  
Gold King

September  
Mine ICP  
Gold

2015  
Release  
King

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NO PRESS RELEASES FOR 2015 6



Exec. Sum/SITREP September 2015  
Gold King Mine Release  
ICP Gold King

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**GOLD KING MINE ATTACHMENT 2 STAKEHOLDERS ALERT AND NOTIFICATION**




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**GOLD KING MINE STAKEHOLDERS ALERT AND NOTIFICATION PLAN**

**INCIDENT COMMAND GOLD KING (ICGK)  
7 SEPTEMBER 2015**


**U.S. ENVIRONMENTAL PROTECTION AGENCY**

  
\_\_\_\_\_  
Incident Commander, Chris Ruhl (R6)

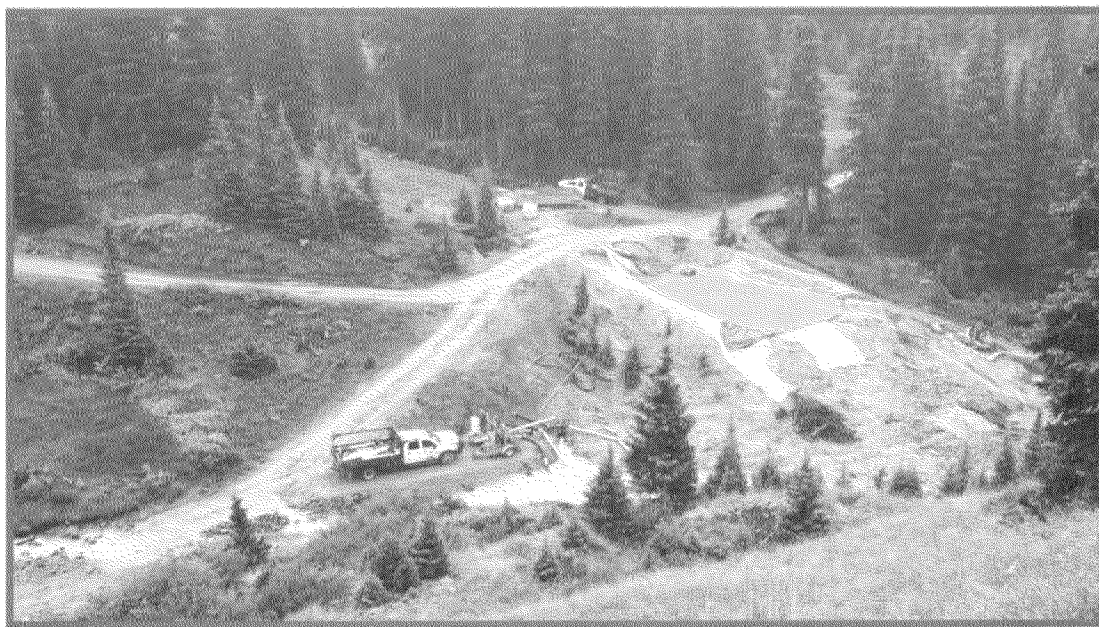
9/7/15  
Date

  
\_\_\_\_\_  
Deputy Incident Commander, David Ostrander (R8)

9/7/15  
Date

  
\_\_\_\_\_  
Deputy Incident Commander, Peter Guria (R9)

9/7/15  
Date





**Incident:** EPA Response to Gold King Mine Release Incident  
**Subject:** Gold King Mine Stakeholders Alert and Notification Plan

**Strategic Objectives**

1. Notify stakeholders throughout the entire watershed of any mine related activities that impact the watershed.
2. Intended to address life notification and information.

**INTRODUCTION**

The Gold King Mine Stakeholders Alert and Notification Plan is intended to take the necessary action for life safety throughout the watershed in Regions 8, 6, and 9. The Plan also includes a notification related only activities alert for rainfall event. The Plan in its current form will remain for site. The Plan is intended to first address of notification and information for initial notification, all parties are responsible for assessing the for response and notification.

**Planning Scenario** This Plan is intended to take the necessary action for life safety normal reporting requirements or action necessary for life safety.

The framework Plan is based on the assumption that existing flows timing and dilution. At a measured flow of 1000cfs at the below Silverton, a spill or runoff event will likely take reach of river.

1. 30 minutes: Mine Operations City to limits Silverton
2. 30 minutes: Silverton to entrance of Animas River canyon
3. 10 hours: Animas River Canyon to Bakers Bridge
4. 10 hours: Baker's Bridge to Northern Durango city limits
5. 6 hours: Northern Durango City Limits to Southern Ute Res
6. 12 hours: Southern Ute Reservation Boundary to NM State

**ALERT LEVELS**

**Notification Only**

- An identified site on related event affecting Cement Creek that will physical or poses safety a concern for but down stream be users perceived as a negative event on the media. stakeholders, public
- This could include a precipitation event causing discolora to mine operations, a storm event that may cause or any other event that could cause limited discolor



**Alert I**

- An identified event at the mine physical site safety that is un-  
concern, but may be negatively impacted by the  
Creek.
- This could include a limited or temporary release of  
wastewater that may be identifiable through or observation know or  
direct measurements of , or turbidity in mine that waste could discharge  
anywhere above the tations USGS before going S
- This could also include identification of a storm event  
causing significant runoff leading to discoloration through  
Animas River identified abo

**Alert II**

- An identified event that public have for limited downstream negative  
users for physical environmental seffect
- This could include a failure of treatment systems o  
operations.
- This could include a surge of mine waste that overcomes  
period.
- This could include a major storm event that would  
drainages and large amounts of mine waste sediment  
widespread identifiable turbidity and. discoloration

**Alert II I**

- This will include are all or events will likely cause environmental large  
physical effects.
- This will include events an extreme as a disaster event or shutting  
operations.
- This will include additional failures, immediate catastrophic mine slope dump failure  
similar event.

**NOTIFICATION PROTOCOL**

**Notification Only**

- On site - OSC to in notify with EPA 1 ICP hour of identified ev
- EPA IC to in need term to log in daily Situation Report
- EPA ICP to mail Stakeholder list (attached) by end of day.





**Alert I**

- On site - OSC to notify EPA of ICP identified and event. During Command Staff to be EPA ICP notification within 1 hour of
- This will be logged in daily SITREP.
- EPA P to Email - to stakeholder list EPA ICP within notification hour of
- Stakeholder agencies should be notified by end of
- occurs after 6PM
- EPA ICP to ategy hold meeting and determine need for downs
- sampling.

**Alert II**

- On site - OSC to notify EPA Durango ICP Command soon Staff as prac should be notified EPA within notification hour of
- On site OSC should attempt immediate phone contact with contact should be requested through radio link to
- This will be logged . in daily SITREP
- EPA IC to mail - send to E stakeholder upon EPA ICP immediate notification.
- Stakeholder agencies should be verbally noticed within one hou contact per agency is necessary.
- EPA ICP to hold strategy meeting to determine downstre needs and activation of the

**Alert III**

- On site - OSC to notify EPA Durango ICP Command soon Staff as prac should be notified immediately upon ICP notification.
- On site OSC should attempt immediate phone contact with contact should requested be through radio link to CSP Montrose
- EPA IC should make notification to the 880 National Response
- On site - C OSEPA ICP should establish communication.
- This will be logged . in daily SITREP
- EPA Email - to stakeholder list immediately notification. EPA
- Stakeholder agencies should be verbally notified by EPA ICP one contact per agency is necessary.
- EPA ICP to hold strategy meeting nitroing deta/d one sampling needs and activation of the JIC.
- EPA dbedule to stakeholder briefing as soon as practical.